

REMARKS**Summary of the Office Action**

Claim 1 was rejected under 35 U.S.C. § 112, second paragraph, as being indefinite.

Claims 1 and 3-5 were rejected under 35 U.S.C. § 102(b) as being anticipated by Howard (U.S. Patent No. 5,589,714).

Claims 1-3 and 5 were rejected under 35 U.S.C. § 102(b) as being anticipated by Hsiao et al. (U.S. Patent No. 5,292,688).

Claims 1-6 were rejected under 35 U.S.C. § 103 as being unpatentable over Howard or Hsiao et al. in view of Thomas (U.S. Patent No. 5,828,126) or Lin et al. (U.S. Patent No. 5,468,999).

Summary of the Response to the Office Action

Applicants have amended claims 1 and 6.

Applicants have added new claim 7.

All Claims Define Allowable Subject Matter

Claim 1 was rejected under 35 U.S.C. § 112, second paragraph, as being indefinite.

Applicants respectfully traverse the rejection. The Office Action asserts that $\tan\delta$ is indefinite.

As described in Applicants' specification at page 9, ll. 10-11, $\tan\delta$ is an index of the degree of dielectric loss of the resin. As described at page 25, ll. 9-11, $\tan\delta$ may be measured by use of an impedance/gain phase analyzer (model: HP4194A, product of HEWLETT PACKARD). Thus, Applicants respectfully submit that $\tan\delta$ is not indefinite in light of the present specification, and that the parameter $\tan\delta$ was understood by those of skill in the art at the time of Applicants' invention.

The Office Action asserts that an embedding resin is indefinite. As described in Applicants' specification at paragraph 0079, and illustrated in Fig. 20, the through hole 110 in which the laminated chip capacitors 130 are provided is filled with an embedding resin 160. Also, as described at paragraphs 0087 and 0088, and illustrated in Fig. 4, a dispenser can feed embedding resin 6 into spaces between the opening and chip capacitors 4 provided in opening 2. Thus, Applicants respectfully submit that the claimed embedding resin refers to element 160 as described in the specification as originally filed. Applicants respectfully request that the rejection of claim 1 under 35 U.S.C. § 112, second paragraph, be withdrawn.

Claims 1 and 3-5 were rejected under 35 U.S.C. § 102(b) as being anticipated by Howard. To the extent the Examiner considers the rejection to apply to amended claim 1, the rejection is traversed as being based on a reference that does not show the novel combination of features recited in amended claim 1.

Claim 1 now recites a combination of features including “a substrate in which a build-up layer formed by laminating an insulating layer and a wiring layer in alternate fashion is formed on said embedding resin.” Support for these claimed features can be found at, for example, page 8, ll. 16-19, and page 15, ll. 8-12, of Applicants' specification as originally filed. Applicants respectfully submit that Howard does not show at least the features of “a substrate in which a build-up layer formed by laminating an insulating layer and a wiring layer in alternate fashion is formed on said embedding resin” as recited in amended claim 1.

Claims 3-5 depend from claim 1, and recite the same combination of allowable features recited therein, as well as additional features that further distinguish over the prior art.

Applicants request that the rejection of claim 1, and claims 3-5 dependent therefrom, under 35 U.S.C. § 102, be withdrawn.

Claims 1-3 and 5 were rejected under 35 U.S.C. § 102(b) as being anticipated by Hsiao et al. To the extent the Examiner considers the rejection to apply to amended claim 1, the rejection is traversed as being based on a reference that does not show the novel combination of features recited in amended claim 1.

As described above, claim 1 now recites a combination of features including “a substrate in which a build-up layer formed by laminating an insulating layer and a wiring layer in alternate fashion is formed on said embedding resin.” Applicants respectfully submit that Hsiao et al. does not show at least the features of “a substrate in which a build-up layer formed by laminating an insulating layer and a wiring layer in alternate fashion is formed on said embedding resin” as recited in amended claim 1.

Claims 2-3 and 5 depend from claim 1, and recite the same combination of allowable features recited therein, as well as additional features that further distinguish over the prior art. Applicants request that the rejection of claim 1, and claims 2-3 and 5 dependent therefrom, under 35 U.S.C. § 102, be withdrawn.

Claims 1-6 were rejected under 35 U.S.C. § 103 as being unpatentable over Howard or Hsiao et al. in view of either Thomas or Lin et al. To the extent the Examiner considers the rejection to apply to amended claim 1, the rejection is traversed as being based on a combination of references that neither teach nor suggest the novel and unobvious combination of features recited in amended claim 1. As described above, Applicants respectfully submit that neither Howard nor Hsiao et al. teach or suggest the combination of features recited in amended claim 1.

including “a substrate in which a build-up layer formed by laminating an insulating layer and a wiring layer in alternate fashion is formed on said embedding resin.” Applicants submit that neither Thomas nor Lin et al. make up for the deficiencies of Howard and Hsiao et al.

Claims 2-6 depend from claim 1, and recite the same combination of allowable features recited therein, as well as additional features that further distinguish over the prior art. For at least these reasons, Applicants respectfully request that the rejection of claim 1, and claims 2-6 dependent therefrom, under 35 U.S.C. § 103, be withdrawn. Applicants respectfully submit that all pending claims are in condition for allowance.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned “**Version with markings to show changes made.**”

CONCLUSION

In view of the foregoing, Applicants respectfully request reconsideration and the timely allowance of the pending claims. Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact Applicants’ undersigned representative to expedite prosecution.

If there are any other fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-0310. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

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Dated: March 26, 2003

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

Claims 1 and 6 have been amended as follows:

1. (Amended) A wiring board comprising:

an electronic component; ~~{and}~~

an embedding resin having a dielectric constant of less than or equal to about 5 and $\tan\delta$ of less than or equal to about 0.08 ~~{,}~~ ; **and**

a substrate in which a build-up layer formed by laminating an insulating layer and a wiring layer in alternate fashion is formed on said embedding resin,

wherein, said electronic component is embedded in said embedding resin.

6. (Amended) The wiring board according to claim 1, ~~{further comprising:~~

~~—— a] wherein the substrate[, including a build-up layer formed by laminating an insulating layer and a wiring layer in alternate fashion,]~~ **is** formed on at least one surface of a core substrate; and

an opening **is** formed so as to penetrate at least one of said core substrate and said build-up layer,

wherein said electronic component is placed in the opening and embedded by means of said embedding resin.

New claim 7 has been added.